

Mortality Report

Fiscal Year 2007

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Executive Summary

This report examines Tribal and Regional Behavioral Health Authority (T/RBHA) mortality for the Fiscal Year 2007 (FY07), which is July 1, 2006 through June 30, 2007. The mortality data is presented in two sections: Section I provides a general overview and Section II examines cause of death.

Section I: Overview

- **876** enrolled members died in FY07. T/RBHAs ranking highest in mortality were ValueOptions with **399** mortalities, Community Partnership of Southern Arizona-5 (CPSA-5) with **261** mortalities and Northern Arizona Regional Behavioral Health Authority (NARBHA) with **116** mortalities.
- When adjusted for population, the highest rates of mortality were CPSA-5 at **8.96** mortalities per 1,000 enrolled members, NARBHA at **7.7** mortalities per 1,000 enrolled members, and Community Partnership of Southern Arizona-3 (CPSA-3) at **7.18** mortalities per 1,000 enrolled members. The system-wide rate for all mortalities was **6.5** per 1,000 enrolled members.
- Individuals in the Serious Mental Illness (SMI) program had the highest rate of mortality at **4** per 1,000 enrolled members, followed by General Mental Health (GMH) at **2** per 1,000 enrolled members, Substance Abuse (SA) at **1** per 1,000 enrolled members and Child/Adolescent at **0.09** per 1,000 enrolled members.

Section II: Cause of Death

Natural Causes (54%)

54% of all deaths of enrolled members during FY07 occurred due to natural causes. T/RBHAs with highest rates of death due to natural causes were NARBHA at 4.85 mortalities per 1,000 enrolled members, CPSA-5 at 4.57 mortalities per 1,000 enrolled members, and CPSA-3 at 4.34 mortalities per 1,000 enrolled members.

Accidental Deaths (20%)

20% of all deaths of enrolled members during FY07 occurred due to accident, including accidental overdose. T/RBHAs with the highest rates of accidental death were CPSA-5 at 1.82 mortalities per 1,000 enrolled members, ValueOptions at 1.39 mortalities per 1,000 enrolled members, and CPSA-3 at 1.17 mortalities per 1,000 enrolled members.

Unknown Cause (13%)

13% of all deaths of enrolled members during FY07 occurred due to unknown causes. T/RBHAs with the highest rates of mortality due to unknown causes were CPSA-5 at 1.61 mortalities per 1,000 enrolled members, Cenpatico-2 (CBHS-2) at 1.58 mortalities per 1,000 enrolled members, and Pascua Yaqui at 1.06 mortalities per 1,000 enrolled members.

Death by Suicide (10%)

10% of all deaths of enrolled members during FY07 occurred due to intentional suicide. The T/RBHA with the highest rate of suicide was NARBHA at 1.06 deaths per 1,000 enrolled members.

Death by Homicide (3%)

3% of all deaths of enrolled members during FY07 occurred due to homicide. All T/RBHAs had rate of mortality due to homicide of less than 1 death per 1,000 enrollees.

Discussion

Comparing previous mortality analysis with this FY07 report, consistency in cause of mortality is noted:

- Approximately half of mortality is due to natural causes
- Approximately 20% of mortality is due to accidental death, including accidental overdose
- Approximately 10% of mortality is due to intentional suicide

In contrast to previous mortality analysis, the rate of mortality of enrollees in the SMI program is markedly reduced, from 12.4 mortalities per 1,000 SMI program enrollees in FY 05 to 4 mortalities per 1,000 SMI program enrollees in FY 07.

Contrasting 2004 US and Arizona data from the CDC website with the current FY07 report:

	US	Arizona	Our System
	2004	2004	FY07
Overall Death Rate	8.0 / 1000	7.6 / 1000	6.5 / 1000
Accidental Death Rate	0.4 / 1000	0.5 / 1000	1.4 / 1000
Suicide Death Rate	0.11 / 1000	0.15 / 1000	0.72 / 1000

It thus appears that, although overall mortality in our system is not in excess of the general population, individuals in our system are about 3 times more likely to die accidentally and about 5 times more likely to die by suicide than the general population.

Implications for policy might be increasing emphasis on suicide prevention and accidental drug overdose prevention.

As natural causes remains the largest category of mortality, implications for policy might be to continue promoting healthy lifestyle habits, monitoring for weight gain and dyslipidemia, and increasing co-ordination with primary care physicians.

Section I: Overview

This section examines statewide mortality numbers and rates, with breakouts for geographic service area and behavioral health category.

Statewide Mortalities

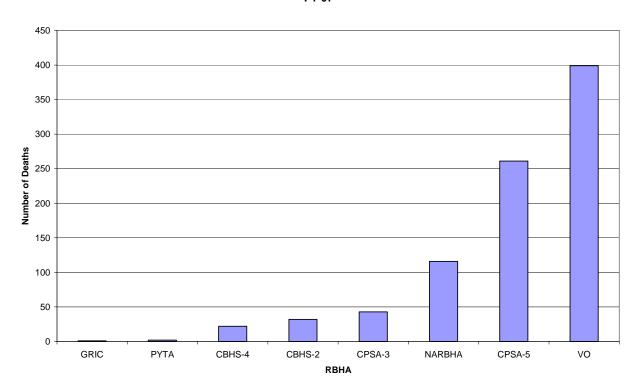
876 enrolled members died statewide in FY07.

467 (53%) were male and 409 (47%) were female.

91% were Caucasian/white, 7% were African American/Black, 2% were Native American, and less than 1% were Asian. 15% were Hispanic/Latino.

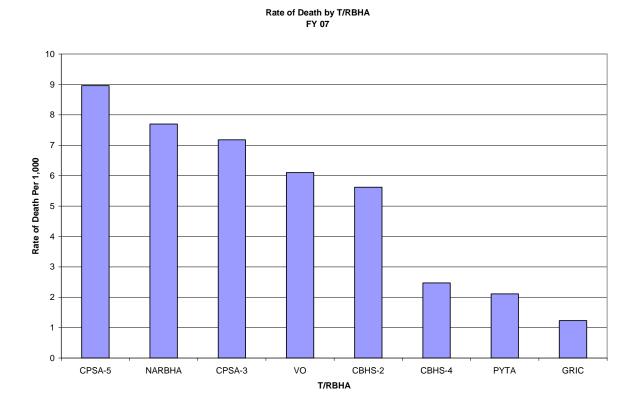
The Maricopa County RBHA ValueOptions (VO) had the most mortalities at 399.

Statewide Mortality Analysis for All RBHAs FY 07



Rates of Death

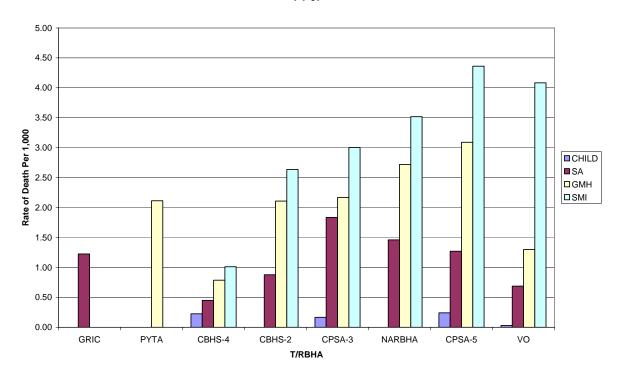
When adjusted for population, highest rates of mortality were CPSA-5 at 8.96 mortalities per 1,000 enrolled members, NARBHA at 7.7 mortalities per 1,000 enrolled members, and CPSA-3 at 7.18 mortalities per 1,000 enrolled members. The statewide rate for all mortality was 6.5 mortalities per 1,000 enrolled members.



Individuals in the Serious Mental Illness (SMI) behavioral health category had the highest rate of mortality at 4 mortalities per 1,000 enrolled members, followed by General Mental Health (GMH) at 2 mortalities per 1,000 enrolled members, Substance Abuse (SA) at 1 mortality per 1,000 enrolled members, and Child/Adolescent at 0.09 mortalities per 1,000 enrolled members.

CPSA-5 had the highest rate of mortality for SMI (4.36 mortalities per 1,000 enrolled members), GMH (3.09 mortalities per 1,000 enrolled members) and Child/Adolescent (0.24 mortalities per 1,000 enrolled members). CPSA-3 had the highest mortality rate for SA at 1.84 mortalities per 1,000 enrolled members, followed by NARBHA at 1.46 mortalities per 1,000 enrolled members.

Rates of Death Per 1,000 By Behavioral Health Category FY 07



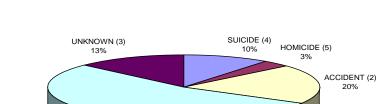
Section II: Cause of Death

This section examines cause of death statewide.

NATURAL CAUSES (1)

Cause of Death Statewide

54% of mortality (470 enrolled members) was due to natural causes in FY07. 20% of mortality was due to accidental death including accidental overdose, 13% of mortality was due to unknown cause of death, 10% of mortality was due to intentional suicide, and 3% of mortality was due to homicide.



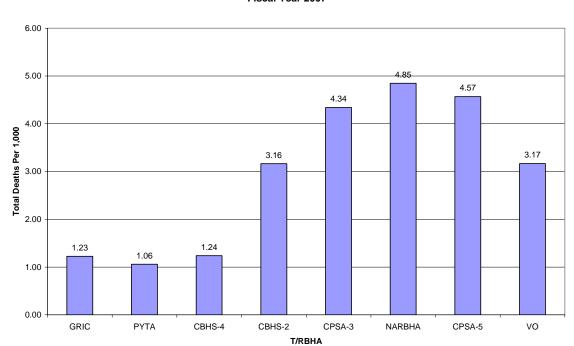
Cause of Death Statewide Fiscal Year 2007

Natural Causes

Highest rates of mortality due to natural causes were NARBHA at 4.85 mortalities per 1,000 enrolled members, CPSA-5 at 4.57 mortalities per 1,000 enrolled members, and CPSA-3 at 4.34 mortalities per 1,000 enrolled members.

	Number of Deaths by		Total FY 07	
T/RBHA	Natural Causes	Rate Per 1,000	Deaths	% of Total
GRIC	1	1.23	1	100%
PYTA	1	1.06	2	50%
CBHS-4	11	1.24	22	50%
CBHS-2	18	3.16	32	56%
CPSA-3	26	4.34	43	60%
NARBHA	73	4.85	116	63%
CPSA-5	133	4.57	261	51%
VO	207	3.17	399	52%
Total	470		876	54% ¹

 $^{^{1}}$ % total in total row is calculated by the number of deaths per cause divided by total FY 07 deaths

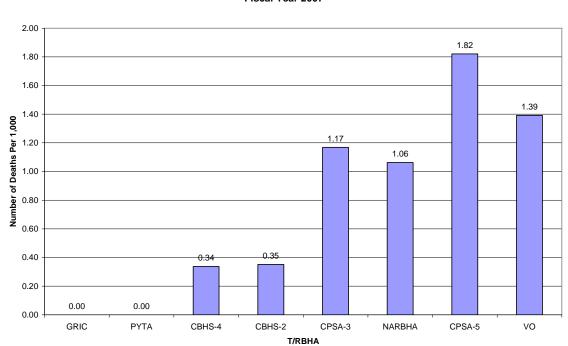


Rate of Death for Natural Causes Fiscal Year 2007

Accidental Deaths

Accidental deaths accounted for 20% of all mortality in FY07. Highest rates of accidental deaths were CPSA-5 at 1.82 mortalities per 1,000 enrolled members, ValueOptions at 1.39 mortalities per 1,000 enrolled members, and CPSA-3 at 1.17 mortalities per 1,000 enrolled members.

T/RBHA	Total Number of Deaths by Accident	Rate Per 1,000	Total FY 07 Deaths	% of Total
GRIC	0	0.00	1	0.00%
PYTA	0	0.00	2	0.00%
CBHS-4	3	0.34	22	13.64%
CBHS-2	2	0.35	32	6.25%
CPSA-3	7	1.17	43	16.28%
NARBHA	16	1.06	116	13.79%
CPSA-5	53	1.82	261	20.31%
VO	91	1.39	399	22.81%
Total	172		876	19.63%

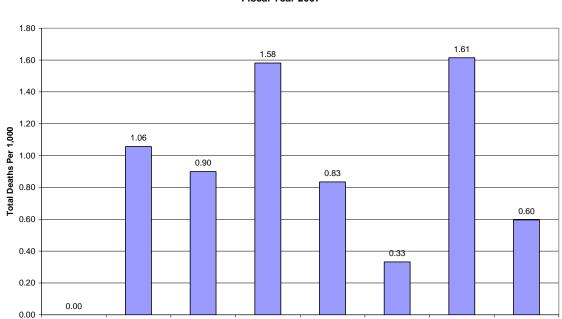


Rate of Death by Accident Fiscal Year 2007

Unknown Cause

Death by unknown cause accounted for 13% of all mortality for FY07. Highest rates of mortality due to unknown cause were CPSA-5 at 1.61 mortalities per 1,000 enrolled members, CBHS-2 at 1.58 mortalities per 1,000 enrolled members, and Pascua Yaqui at 1.06 mortalities per 1,000 enrolled members.

T/RBHA	Total Deaths by Unknown Cause	Rate Per 1,000	Total FY 07 Deaths	% Total
GRIC	0	0.00	1	0.00%
PYTA	1	1.06	2	50.00%
CBHS-4	8	0.90	22	36.36%
CBHS-2	9	1.58	32	28.13%
CPSA-3	5	0.83	43	11.63%
NARBHA	5	0.33	116	4.31%
CPSA-5	47	1.61	261	18.01%
VO	39	0.60	399	9.77%
Total	114		876	13.01%



Rate of Death By Unknown Cause Fiscal Year 2007

Death by Suicide

GRIC

PYTA

CBHS-4

Intentional suicide accounted for 10% of all mortality in FY07. Highest rate of intentional suicide was NARBHA at 1.06 mortalities per 1,000 enrolled members.

CBHS-2

T/RBHA

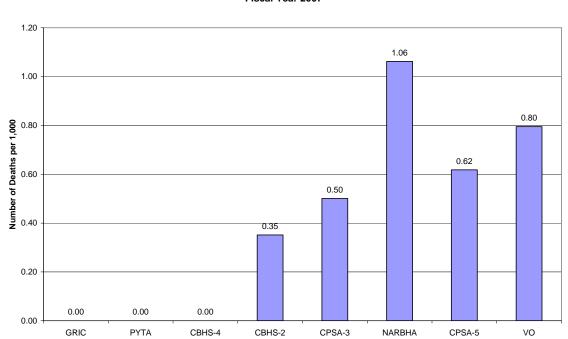
NARBHA

CPSA-3

CPSA-5

VO

T/RBHA	Total Deaths by Suicide	Rate Per 1,000	Total FY 07 Deaths	% Total
GRIC	0	0.00	1	0.00%
PYTA	0	0.00	2	0.00%
CBHS-4	0	0.00	22	0.00%
CBHS-2	2	0.35	32	6.25%
CPSA-3	3	0.50	43	6.98%
NARBHA	16	1.06	116	13.79%
CPSA-5	18	0.62	261	6.90%
VO	52	0.80	399	13.03%
Total	91		876	10.39%



T/RBHA

Rate of Death By Suicide Fiscal Year 2007

Death by Homicide

Death by homicide was 3% of total mortality in FY07. All T/RBHAs had rate of mortality due to homicide of less than 1 death per 1,000 enrollees.

T/RBHA	Total Deaths by Homicide	Rate Per 1,000	Total FY 07 Deaths	% Total
GRIC	0	0.00	1	0.00%
PYTA	0	0.00	2	0.00%
CBHS-4	0	0.00	22	0.00%
CBHS-2	1	0.18	32	3.13%
CPSA-3	2	0.33	43	4.65%
NARBHA	6	0.40	116	5.17%
CPSA-5	10	0.34	261	3.83%
VO	10	0.15	399	2.51%
Total	29		876	3.31%

Rate of Death by Homicide Fiscal Year 2007

